

M. Brannock

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APR 18 2001  
TECH CENTER 1600/2900

Page 1 of 7  
# 11/lms  
4-20-01  
1646

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/445,614  
DATE: 04/06/2001  
TIME: 10:45:39

Input Set : A:\T1481.txt  
Output Set: N:\CRF3\04062001\I445614.raw

ENTERED

4 <110> APPLICANT: Bonnert, Timothy Peter  
6 <120> TITLE OF INVENTION: HUMAN VANILLOID RECEPTOR-LIKE RECEPTOR  
9 <130> FILE REFERENCE: T1481  
11 <140> CURRENT APPLICATION NUMBER: 09/445,614  
12 <141> CURRENT FILING DATE: 1999-12-08  
14 <150> PRIOR APPLICATION NUMBER: 9827016.8  
15 <151> PRIOR FILING DATE: 1998-12-08  
17 <160> NUMBER OF SEQ ID NOS: 19  
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
21 <210> SEQ ID NO: 1  
22 <211> LENGTH: 2469  
23 <212> TYPE: DNA  
24 <213> ORGANISM: Homo sapiens  
26 <400> SEQUENCE: 1  
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28 ggtcctggct ggaccgagca gcctcctcct cctaggatga cctcacccctc cagctctcca 120  
29 gttttcaggt tggagacatt agatggaggc caagaagatg gctctgaggc ggacagagga 180  
30 aagctggatt ttgggagcgg gctgcctccc atggagtcac agttccaggc cgaggaccgg 240  
31 aaattcgccc ctcagataag agtcaacctc aactaccgaa agggaacagg tgccagtcag 300  
32 ccggatccaa accgatttga ccgagatcgg ctcttcaatg cggctctccc ggggtgtccc 360  
33 gaggatctgg ctggacttcc agagtacctg agcaagacca gcaagtacct caccgactcg 420  
34 gaatacacag agggctccac aggtaagacg tgcctgatga aggctgtgct gaaccttaag 480  
35 gacggagtcg atgcctgcat tctgccactg ctgcagatcg acagggactc tggcaatcct 540  
36 cagcccctgg taaatgcccc gtgcacagat gactattacc gaggccacag cgctctgcac 600  
37 atcgccattg agaagaggag tctgcagtgt gtgaagctcc tgggtggaga tggggccaat 660  
38 gtgcatgccc gggcctgcgg ccgcttcttc cagaagggcc aagggaactg cttttatttc 720  
39 ggtgagctac cctctctttt ggccgcttgc accaagcagt gggatgtggt aagctacctc 780  
40 ctggagaacc cacaccagcc cgcagcctcg caggccactg actcccaggc caacacagtc 840  
41 ctgcatgccc tagtgatgat ctcggaacaac tcagctgaga acattgcact ggtgaccagc 900  
42 atgtatgatg ggctcctcca agctggggcc cgcctctgcc ctaccgtgca gcttgaggac 960  
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44 attttcaggc acatcctgca gcgggagttt tcaggactga gccaccttcc ccgaaagtcc 1080  
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46 tgtgaggaga actcagtgtt ggagatcatt gcctttcatt gcaagagccc gcaccgacac 1200  
47 cgaatggtcg ttttgaggcc cctgaacaaa ctgctgcagg cgaaatggga tctgctcatc 1260  
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51 ggccagctgt ggtacttctg gcggcgccac gtgttcatct ggatctcgtt catagacagc 1500  
52 tactttgaaa tcctcttccct gttccaggcc ctgctcacag tgggtgtccc ggtgctgtgt 1560  
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54 aacctgcttt actatacacg tggcttccag cacacaggca tctacagtgt catgatccag 1680  
55 aaggctcatc tgcgggacct gctgcgcttc cttctgatct acttagtctt ccttttcggc 1740  
56 ttgctgttag cctgggtgag cctgagccag gaggcttggc gcccgaagc tctacaggc 1800  
57 cccaatgcca cagagtcagt gcagcccatg gagggacagg aggacgaggg caacggggcc 1860  
58 cagtagaggg gtatcctgga agcctccttg gagctcttca aattcaccat cggcatggc 1920  
59 gagctggcct tccaggagca gctgcacttc cgcggcatgg tgcctgctgt gctgctggcc 1980

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60 tacgtgctgc tcacctacat cctgctgctc aacatgctca tcgccctcat gagcgagacc 2040
61 gtcaacagtgc tcgccactga cagctggagc atctggaagc tgcagaaagc catctctgtc 2100
62 ctggagatgg agaattggcta ttggtggtgc aggaagaagc agcgggcagg tgtgatgctg 2160
63 accgttgcca ctaagccaga tggcagcccg gatgagcgct ggtgcttcag ggtggaggag 2220
64 gtgaactggg cttcatggga gcagacgctg cctacgctgt gtgaggaccc gtcaggggca 2280
65 ggtgtccctc gaactctcga gaaccctgtc ctggcttccc ctcccaagga ggatgaggat 2340
66 ggtgcctctg aggaaaaacta tgtgcccgctc cagctcctcc agtccaaactg atggcccaga 2400
67 tgcagcagga ggccagagga cagagcagag gatctttcca accacatctg ctggctctgg 2460
68 ggtcccagt 2469
70 <210> SEQ ID NO: 2
71 <211> LENGTH: 824
72 <212> TYPE: PRT
73 <213> ORGANISM: Homo sapiens
75 <400> SEQUENCE: 2
76 Met Thr Ser Pro Ser Ser Ser Pro Val Phe Arg Leu Glu Thr Leu Asp
77 1 5 10 15
78 Gly Gly Gln Glu Asp Gly Ser Glu Ala Asp Arg Gly Lys Leu Asp Phe
79 20 25 30
80 Gly Ser Gly Leu Pro Pro Met Glu Ser Gln Phe Gln Gly Glu Asp Arg
81 35 40 45
82 Lys Phe Ala Pro Gln Ile Arg Val Asn Leu Asn Tyr Arg Lys Gly Thr
83 50 55 60
84 Gly Ala Ser Gln Pro Asp Pro Asn Arg Phe Asp Arg Asp Arg Leu Phe
85 65 70 75 80
86 Asn Ala Val Ser Arg Gly Val Pro Gly Ala Gly Gly Ala Thr Cys Thr
87 85 90 95
88 Gly Gly Cys Thr Gly Gly Ala Cys Thr Thr Cys Cys Ala Gly Ala Gly
89 100 105 110
90 Thr Ala Cys Cys Thr Gly Ala Gly Cys Ala Ala Gly Ala Cys Cys Ala
91 115 120 125
92 Gly Cys Ala Ala Gly Thr Ala Cys Cys Thr Cys Ala Cys Cys Gly Ala
93 130 135 140
94 Cys Thr Cys Gly Glu Asp Leu Ala Gly Leu Pro Glu Tyr Leu Ser Lys
95 145 150 155 160
96 Thr Ser Lys Tyr Leu Thr Asp Ser Glu Tyr Thr Glu Gly Ser Thr Gly
97 165 170 175
98 Lys Thr Cys Leu Met Lys Ala Val Leu Asn Leu Lys Asp Gly Val Asn
99 180 185 190
100 Ala Cys Ile Leu Pro Leu Leu Gln Ile Asp Arg Asp Ser Gly Asn Pro
101 195 200 205
102 Gln Pro Leu Val Asn Ala Gln Cys Thr Asp Asp Tyr Tyr Arg Gly His
103 210 215 220
104 Ser Ala Leu His Ile Ala Ile Glu Lys Arg Ser Leu Gln Cys Val Lys
105 225 230 235 240
106 Leu Leu Val Glu Asn Gly Ala Asn Val His Ala Arg Ala Cys Gly Arg
107 245 250 255
108 Phe Phe Gln Lys Gly Gln Gly Thr Cys Phe Tyr Phe Gly Glu Leu Pro
109 260 265 270
110 Leu Ser Leu Ala Ala Cys Thr Lys Gln Trp Asp Val Val Ser Tyr Leu

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111          275          280          285
112 Leu Glu Asn Pro His Gln Pro Ala Ser Leu Gln Ala Thr Asp Ser Gln
113          290          295          300
114 Gly Asn Thr Val Leu His Ala Leu Val Met Ile Ser Asp Asn Ser Ala
115 305          310          315          320
116 Glu Asn Ile Ala Leu Val Thr Ser Met Tyr Asp Gly Leu Leu Gln Ala
117          325          330          335
118 Gly Ala Arg Leu Cys Pro Thr Val Gln Leu Glu Asp Ile Arg Asn Leu
119          340          345          350
120 Gln Asp Leu Thr Pro Leu Lys Leu Ala Ala Lys Glu Gly Lys Ile Glu
121          355          360          365
122 Ile Phe Arg His Ile Leu Gln Arg Glu Phe Ser Gly Leu Ser His Leu
123          370          375          380
124 Ser Arg Lys Phe Thr Glu Trp Cys Tyr Gly Pro Val Arg Val Ser Leu
125 385          390          395          400
126 Tyr Asp Leu Ala Ser Val Asp Ser Cys Glu Glu Asn Ser Val Leu Glu
127          405          410          415
128 Ile Ile Ala Phe His Cys Lys Ser Pro His Arg His Arg Met Val Val
129          420          425          430
130 Leu Glu Pro Leu Asn Lys Leu Leu Gln Ala Lys Trp Asp Leu Leu Ile
131          435          440          445
132 Pro Lys Phe Phe Leu Asn Phe Leu Cys Asn Leu Ile Tyr Met Phe Ile
133          450          455          460
134 Phe Thr Ala Val Ala Tyr His Gln Pro Thr Leu Lys Lys Gln Ala Ala
135 465          470          475          480
136 Pro His Leu Lys Ala Glu Val Gly Asn Ser Met Leu Leu Thr Gly His
137          485          490          495
138 Ile Leu Ile Leu Leu Gly Gly Ile Tyr Leu Leu Val Gly Gln Leu Trp
139          500          505          510
140 Tyr Phe Trp Arg Arg His Val Phe Ile Trp Ile Ser Phe Ile Asp Ser
141          515          520          525
142 Tyr Phe Glu Ile Leu Phe Leu Phe Gln Ala Leu Leu Thr Val Val Ser
143          530          535          540
144 Gln Val Leu Cys Phe Leu Ala Ile Glu Trp Tyr Leu Pro Leu Leu Val
145 545          550          555          560
146 Ser Ala Leu Val Leu Gly Trp Leu Asn Leu Leu Tyr Tyr Thr Arg Gly
147          565          570          575
148 Phe Gln His Thr Gly Ile Tyr Ser Val Met Ile Gln Lys Val Ile Leu
149          580          585          590
150 Arg Asp Leu Leu Arg Phe Leu Leu Ile Tyr Leu Val Phe Leu Phe Gly
151          595          600          605
152 Phe Ala Val Ala Leu Val Ser Leu Ser Gln Glu Ala Trp Arg Pro Glu
153          610          615          620
154 Ala Pro Thr Gly Pro Asn Ala Thr Glu Ser Val Gln Pro Met Glu Gly
155 625          630          635          640
156 Gln Glu Asp Glu Gly Asn Gly Ala Gln Tyr Arg Gly Ile Leu Glu Ala
157          645          650          655
158 Ser Leu Glu Leu Phe Lys Phe Thr Ile Gly Met Gly Glu Leu Ala Phe
159          660          665          670

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Output Set: N:\CRF3\04062001\I445614.raw

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160 Gln Glu Gln Leu His Phe Arg Gly Met Val Leu Leu Leu Leu Leu Ala
161           675           680           685
162 Tyr Val Leu Leu Thr Tyr Ile Leu Leu Leu Asn Met Leu Ile Ala Leu
163           690           695           700
164 Met Ser Glu Thr Val Asn Ser Val Ala Thr Asp Ser Trp Ser Ile Trp
165 705           710           715           720
166 Lys Leu Gln Lys Ala Ile Ser Val Leu Glu Met Glu Asn Gly Tyr Trp
167           725           730           735
168 Trp Cys Arg Lys Lys Gln Arg Ala Gly Val Met Leu Thr Val Gly Thr
169           740           745           750
170 Lys Pro Asp Gly Ser Pro Asp Glu Arg Trp Cys Phe Arg Val Glu Glu
171           755           760           765
172 Val Asn Trp Ala Ser Trp Glu Gln Thr Leu Pro Thr Leu Cys Glu Asp
173           770           775           780
174 Pro Ser Gly Ala Gly Val Pro Arg Thr Leu Glu Asn Pro Val Leu Ala
175 785           790           795           800
176 Ser Pro Pro Lys Glu Asp Glu Asp Gly Ala Ser Glu Glu Asn Tyr Val
177           805           810           815
178 Pro Val Gln Leu Leu Gln Ser Asn
179           820

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181 &lt;210&gt; SEQ ID NO: 3

182 &lt;211&gt; LENGTH: 51

183 &lt;212&gt; TYPE: DNA

184 &lt;213&gt; ORGANISM: Artificial Sequence

186 &lt;220&gt; FEATURE:

187 &lt;223&gt; OTHER INFORMATION: Primer

189 &lt;400&gt; SEQUENCE: 3

190 tgttaccaat ctgaagtggg agcggccgcc tcattttttt tttttttttt t

51

192 &lt;210&gt; SEQ ID NO: 4

193 &lt;211&gt; LENGTH: 21

194 &lt;212&gt; TYPE: DNA

195 &lt;213&gt; ORGANISM: Artificial Sequence

197 &lt;220&gt; FEATURE:

198 &lt;223&gt; OTHER INFORMATION: PCR Primer

200 &lt;400&gt; SEQUENCE: 4

201 caggcccggg catgcacatt g

21

203 &lt;210&gt; SEQ ID NO: 5

204 &lt;211&gt; LENGTH: 21

205 &lt;212&gt; TYPE: DNA

206 &lt;213&gt; ORGANISM: Artificial Sequence

208 &lt;220&gt; FEATURE:

209 &lt;223&gt; OTHER INFORMATION: PCR Primer

211 &lt;400&gt; SEQUENCE: 5

212 ccaggcgag gaccggaaat t

21

214 &lt;210&gt; SEQ ID NO: 6

215 &lt;211&gt; LENGTH: 21

216 &lt;212&gt; TYPE: DNA

217 &lt;213&gt; ORGANISM: Artificial Sequence

219 &lt;220&gt; FEATURE:

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220 <223> OTHER INFORMATION: PCR Primer
222 <400> SEQUENCE: 6
223 gacagctgga gcatctggaa g 21
225 <210> SEQ ID NO: 7
226 <211> LENGTH: 21
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: PCR Primer
233 <400> SEQUENCE: 7
234 gacagctgga gcatctggaa g 21
236 <210> SEQ ID NO: 8
237 <211> LENGTH: 21
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: PCR Primer
244 <400> SEQUENCE: 8
245 cttccagatg ctccagctgt c 21
247 <210> SEQ ID NO: 9
248 <211> LENGTH: 21
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: PCR Primer
255 <400> SEQUENCE: 9
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258 <210> SEQ ID NO: 10
259 <211> LENGTH: 21
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: PCR Primer
266 <400> SEQUENCE: 10
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269 <210> SEQ ID NO: 11
270 <211> LENGTH: 21
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: PCR Primer
277 <400> SEQUENCE: 11
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280 <210> SEQ ID NO: 12
281 <211> LENGTH: 21
282 <212> TYPE: DNA
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: PCR Primer

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VERIFICATION SUMMARY

DATE: 04/06/2001

PATENT APPLICATION: US/09/445,614

TIME: 10:45:40

Input Set : A:\T1481.txt

Output Set: N:\CRF3\04062001\I445614.raw